

**BURN THROUGH AND FLAME PROPAGATION
RESISTANT LAYER OR COVERING**

ABSTRACT OF THE DISCLOSURE

A burn through and flame propagation resistant system, includes a sheet of burn through and flame propagation resistant paper made of aramid fibers, mica flakes, and aramid fibrid binder; and one or more sheets of polymeric film, preferably, flame propagation resistant polymeric film, bonded to at least one major surface of the sheet of burn through and flame propagation resistant paper to form a laminated sheet. Preferably, for many applications, the system is also water vapor transmission resistant with the sheet or sheets of polymeric film or a coating providing the water vapor transmission resistance. The burn through and flame propagation resistant paper and/or polymeric film(s) may have major surface(s) coated with a heat sealable adhesive, e.g. for securing the laminated sheet to itself or another laminated sheet to form a bag or envelope for encapsulating insulation. The laminated sheet may be used as a covering or bag that encapsulates insulation material or as a layer overlaying, intermediate or underlaying one or more layers of insulation material. As an alternative to the laminated sheet, the system may include a sheet of burn through and flame propagation resistant paper which is treated with a heat and/or ultrasonically sealable, moisture and flame propagation resistant polyvinylfluoride water based emulsion.